

Claims

We claim:

1. In a system comprising at least a first device, a second device and a routing infrastructure comprising a plurality of routers used to communicate information between the first device and the second device, a method comprising the steps of:
 - at the first device:
 - receiving an anycast address;
 - injecting an updated route to the anycast address into the routing infrastructure each time the first device roams to a different subnet;
 - sending a binding update to the second device informing the second device of the anycast address; and
 - receiving information from the second device via the anycast address regardless of a location of the first device in the system.
2. The method of claim 1 wherein the anycast address is topologically independent.
- 20 3. The method of claim 1 wherein the anycast address remains constant while the first device is powered on.
4. The method of claim 1 wherein the second device is a home agent for the first device.
- 25 5. The method of claim 1 wherein the second device is a correspondent device in the system.
6. The method of claim 1 wherein the step of receiving an anycast address is 30 performed when the first device is powered on.

7. The method of claim 1 wherein the step of receiving an anycast address is performed when the first device roams to a first foreign subnet.
- 5 8. The method of claim 1 wherein the anycast address is an anycast care-of-address.
9. The method of claim 1 wherein the anycast address is an anycast home address.
- 10 10. The method of claim 1 wherein the location of the first device is transparent to the second device.
11. The method of claim 1 further comprising the steps of:
15 attaching to a mobile router; and
receiving information from the second device via an address assigned to the mobile router.
12. The method of claim 11 further comprising the steps of:
20 de-attaching from the mobile router;
attaching to a new subnet;
injecting an updated route to the anycast address into the routing infrastructure; and
receiving information from the second device via the anycast address.